

Amendments to the Specification:

Please replace Figures 3-5 and 7-10 with Figures 3-5 and 7-10 submitted herewith.

Please insert pages 63-64 containing the Sequence Listing.

Please replace the paragraph on page 8, line 14 with the following rewritten paragraph:

Figure 3 is a pictorial representation of a plant oil-body. The oil-body contains a central core of triglyceride with a surface layer consisting of a phospholipid monolayer and a protein 'coat' consisting predominantly of oleosin. The model is not drawn to scale as the phospholipid and oleosin are greatly exaggerated for illustrative purposes.

Please replace the paragraph on page 8, line 15 with the following rewritten paragraph:

Figure 4 is a pictorial representation of an antigen coupled to an oil-body by the use of biotin and streptavidin molecules. Antigen that is biotinylated enzymatically at the N-terminus is coupled to a biotinylated preparation of oil-bodies with streptavidin as a bridging ligand. This schematic drawing is not drawn to scale. The proteins (antigen, streptavidin & oleosin), phospholipid and biotin are exaggerated in size for illustrative purposes.

Please replace the paragraph on page 8, line 17 with the following rewritten paragraph:

Figure 5 is a schematic representation of transgenic oil-bodies expressing a foreign antigen as a fusion with the oil-body protein, oleosin. Fusions of antigen to oleosin C- or N-termini are targeted to oil-bodies along with native oleosins. The fused antigen is thus expressed at the oil-body surface similar to antigens on bacterial or viral surfaces. The relative size of the oil-body is dramatically underrepresented in this figure.

Please replace the paragraph on page 8, line 24 with the following rewritten paragraph:

Figure 7 (SEQ ID NOS: 1 and 2) is a plasmid map of the expression vector pT7BioHis. The essential features of the pT7BioHis vector are a T7 promoter for gene expression, the biotinylation consensus sequence shown in the green nucleotides where the epsilon amino group of the Lys residue (underlined) is biotinylated in *E. coli*, the blue nucleotides represent the 6XHis residues and the red nucleotides represent the multiple cloning site. Restriction sites are underlined for NdeI, PvuII, NcoI and HindIII.

Please replace the line on page 8, line 25 with the following rewritten paragraph:

Figure 8 is a plasmid map of the recombinant vector pSBS2004-92 M982 TbpB N-lobe. The essential features of pSBS2004-92 TbpB N-lobe are OriC and OripR1 for replication in *Escherichia coli* and *Agrobacterium tumefaciens*, respectively, and gentamycin resistance (GentR). The T-DNA segment that is incorporated into the plant genome lies within the left and right borders and consists of the translational fusion between the Arabidopsis oleosin and M982 TbpB N-lobe driven by the phaseolin promoter and its terminator and the herbicide selection marker, phosphinothricin (PptR).

Please replace the line on page 8, line 27 with the following rewritten paragraph:

Figure 9 shows oil-bodies from several clones of transgenic *Arabidopsis* plants expressing the *N. meningitidis* strain M982 transferrin binding protein B (TbpB) N-lobe as a fusion with oleosin were analyzed for expression of fusion protein.

Panel A - A 15% SDS-PAGE gel stained for protein with Coomassie blue.

Panel B- A Western blot of the SDS-PAGE gel developed with polyclonal antibodies against M982 TbpB.

Lane 1-oil-bodies from wild *Arabidopsis* ; lane 2 - oil-bodies from N1 transgenic line; lane 3 - oil-bodies from N2 transgenic line; lane 4- oil-bodies from N3 transgenic line; lane 5 - oil-bodies from N4 line, and lane 6 - purified MBP-N-lobe fusion protein isolated from *E. coli*.

Please replace the line on page 8, line 30 with the following rewritten paragraph:

Figure 10 is an electroblot demonstrating that the fusion protein of oleosin and *Neisseria meningitidis* TbpB N-lobe retains binding activity for human transferrin. Oil-bodies from several clones of transgenic *Arabidopsis* plants expressing the *N. meningitidis* strain M982 transferrin binding protein B (TbpB) N-lobe as a fusion with oleosin were analyzed for binding of human transferrin. A duplicate SDS-PAGE gel described in Figure 7 was electroblotted and subsequently probed with human transferrin conjugated to horse radish peroxidase.

Lane 1-oil-bodies from wild *Arabidopsis* ; lane 2 - oil-bodies from N1 transgenic line; lane 3 - oil-bodies from N2 transgenic line; lane 4- oil-bodies from N3 transgenic line; lane 5 - oil-bodies from N4 line, and lane 6 - purified MBP-N-lobe fusion protein isolated from *E. coli*.